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Acquisition

**SOFTWARE REQUIREMENTS REVIEW
PROCESS**

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The Software Requirements Review Process (SRRP) is used for the documentation and approval of mission critical computer software maintenance actions. The SRRP documentation provides a record of MAJCOM requests for mission critical software maintenance, a description of specific maintenance actions required, and documents the configuration change approval prior to start of work. The SRRP is designed to support and bridge together MAJCOM operational requirements development, program office maintenance action resource requests, and MAJCOM requests for maintenance funding. The SRRP will be used by AFMC Depot Maintenance Activity Group (DMAG) organizations having mission critical computer software maintenance responsibilities. This instruction implements AFMCPD 63-4, *Software Requirements Review Process* and applies to mission critical computer software. It explains the process, required documentation, responsibilities of participants, and required reviews. The SRRP Users's Guide is published as AFMC FM Handbook, Chapter 97. This instruction does not apply to the Air National Guard or US Air Force Reserve units and members.

1. Software Requirements Review Process (SRRP). The SRRP is used to communicate software support requirements between the process participants. These requirements may be for organic, contract, and/or interservice depot level maintenance. The SRRP is a baseline process that will enable AFMC to trace workload requirements for all types of funding necessary to accomplish software maintenance. As a result, concrete and agreed upon software maintenance requirements between the user, single manager, maintainer, and budget reviewers will be achieved. The SRRP will capture all software maintenance requirements on fielded systems and projections for those new systems anticipated during the requirements cycle. Requirements being reviewed will include the execution year, prior fiscal year, and the next three fiscal years. For the maintainer, the SRRP will provide the vehicle to define, validate, and justify the resources necessary to provide the user requested software maintenance support. The SRRP is designed with Depot Maintenance Activity Group (DMAG) customers in mind for the purpose of outlining software work requests. This process will include identification of all funding sources and interrelated tasks. Some of these interrelated tasks may include new development, sustaining engineering efforts, or interim contract support which are in direct support of software maintenance requirements.

Once the requirement has been identified and validated per the SRRP, the data will be file maintained in the G072 data base.

1.1. Process Flow. The SRRP consists of the five steps, Requirements Identification, Requirements Discussion, Analysis, User Review, and the Users Annual Review (UAR). Upon completion of these five steps, the data is used in the Depot Purchased Equipment Maintenance (DPEM) Process to coordinate budgetary requirements and funding between AFMC and its customers. The DPEM Process is described in the DPEM Process Guide, Chapter 92 of the AFMC FM Handbook.

1.1.1. Requirements Identification. The user will submit candidate requirements based on a variety of reasons: to correct faults that exist in the code from design (corrective maintenance), the need for improved performance or other attributes (perfective maintenance), or to adapt the weapon systems to a changed environment (adaptive maintenance). Software requirements are submitted throughout the year until a predetermined cutoff date. These requirements are collected for analysis and implementation in a fixed time period known as a block cycle. Automatic Text Equipment (ATE) and Unit Under Test (UUT) requirements are identified and usually corrected at the first opportunity after change requirements are detected. Emergency changes are interjected into existing work due to the typical 24 hour turn-a-round requirement. These emergency change requirements flow through a time compressed SRRP to accommodate the short time requirement. Emergency changes will use the same documentation as a requirement scheduled in a normal block cycle. Once a potential requirement is identified, it is presented to the MAJCOM requirements focal point. The Requirements Focal Point is that organization which consolidates and prioritizes the requirements for the MAJCOM user. The Requirements Focal Point then submits the requirements to the Single Manager (SM), or appointed representative, for review and incorporation.

1.1.2. Requirements Discussion. The SM and the user will discuss the candidate requirements to ensure complete understanding of the required change. An agreement on the extent of the changes will be made prior to submission for analysis. Upon completion of this discussion, the SM submits the requirements to the Software Support Organizations (SSO) for analysis. For those contracting efforts that require a new acquisition effort, acquisition procedures apply.

1.1.3. Analysis. Analysis is conducted on those requirements as a result of the requirements discussion. The results of this analysis will be used to complete the AFMC Form 230, **Software Support Requirements Documentation** and AFMC Form 231, **Software Task Detail Description**. The completed forms will be submitted to the user at least on an annual basis, or as required by the customer.

1.1.4. The User Review and UAR are described under paragraph 1.3., Reviews.

1.2. Responsibilities. There are several participants that have responsibilities in this process.

1.2.1. MAJCOM Customer. The MAJCOM is responsible for developing and presenting, to the SM, a clear description of the required system capability. An authorized MAJCOM representative will sign the completed AFMC Form 230 after the User Review, for which the requirement is discussed, acknowledging the proposed plan/solution to their requirement.

1.2.2. Single Manager (SM). With the responsibility to provide the user requested capabilities, the SM has a central role in the SRRP. The SM must ensure user requirements are received and understood, then communicated to the SSO for analysis. When analysis is completed, the SM works with both the MAJCOM and the SSO to conduct the User Reviews and UAR. The SM, as

the chairman of the Configuration Control Board (CCB), is responsible for approval of all configuration changes to the software. This responsibility can be delegated to the chair of the Software Configuration Control Sub-Board (SCCSB). Approval to change the configuration is documented by signing the AFMC Form 230.

1.2.3. Software Support Organization (SSO). The SSO is the organization that will be accomplishing maintenance actions to provide the user requested capability. This organization will be responsible for performing the up-front analysis, and documenting the analysis and proposed solution on the AFMC Forms 230 and 231. The SSO will participate in the User Reviews and UAR. The SSO will perform the software maintenance tasks only after approval and funding are secured.

1.3. Reviews. There are two reviews within the SRRP, the User Reviews and the User's Annual Review (UAR).

1.3.1. User Reviews. Once the customer's requirements are gathered, submitted to the SM, and analyzed by the SSO, the information is reviewed between the customer, the SM, and the SSO. These frequent reviews ensure each of the participants have a mutual understanding of the customer's requirements, what is involved in obtaining the required capability, and the impacts of the changes to the system. Discussions focus on how the proposed changes support valid operational requirements or correct deficiencies. This information will help the user determine the priority of the proposed changes and when they will be incorporated into the weapon system. The User's Review is not scheduled for any specific time of the year as a requirement of the SRRP. These reviews are based on system/program requirements. Depending on the program, these reviews may be on an as needed basis, or routinely scheduled on a weekly, monthly, or quarterly basis.

1.3.2. Users Annual Review (UAR). The UAR is an annual review where the SRRP Participants have the opportunity to discuss all software support requirements. This review ensures the consolidated planned work requirements reflect the actions necessary to satisfy the customer's operational requirement. The UAR may be conducted by any means that is deemed appropriate by the MAJCOM (e.g., VTC, face-to-face, teleconference, etc.). At the request of the customer, each ALC Supplier will arrange for a UAR, in the requested format. The Software Support Requirements Package (SSRP) is the prescribed document to facilitate the UAR. Completion of the UAR determines which work requirements are correctly defined, coordinated, documented, and validated. These approved requirements are then used to produce the financial requirements identified in the Logistics Support Review (LSR) brochure as part of the DPEM process. All software requirements in DPEM brochures must be supported by an approved and properly coordinated AFMC Form 230.

1.4. Documentation. With the complexity of the systems and a wider range of missions for existing systems, software changes are needed. These changes are typically identified as deficiencies to the existing system capabilities and are the primary input to the Requirements Identification step of the process.

1.4.1. Candidate Requirements List. The candidate requirements list is a list of candidate requirements (desired capabilities) which the user needs for a system to perform assigned missions. This list is a product of the Requirements Identification activity and is broken out by system. Specific requirements are given to the responsible SM. Once the list is prepared, it is given to the SM for analysis and possible incorporation into the system.

1.4.2. The AFMC Form 230 and AFMC Form 231 will be used as the vehicles to document analysis results and coordination between the participants. Completed AFMC Forms comprise the documentation necessary to accomplish the User's Review and the UAR. Results of the analysis are annotated on the AFMC Form 230 with the details of the individual tasks documented on the AFMC Form 231. The user will take this information as part of the data set used to justify the information in the LSR Brochure and help prioritize requirements.

1.4.2.1. AFMC Form 230 will be used as a primary data source during both the User Reviews and the UAR. Completion of the User Reviews, should result in the user's concurrence of the analysis. Concurrence is noted by signature on the AFMC Form 230. With concurrence of the requirement by the participants, planning, budgeting, and subsequent validation of the maintenance needs can be accomplished. The AFMC Forms 230 and 231 will be updated as requirements changes occur and will be reviewed at least annually, or more often as deemed necessary by the program participants.

1.4.2.2. The AFMC Form 230 is also used to record the SCCSB approval to make changes to a configuration baseline. There may be instances where the SCCSB will not sign the AFMC Form 230. This may occur when the forms reflect out-year workload projections. This projection allows the user and the SM sufficient time to plan and budget for the future requirement. Therefore, when a block cycle change is ready for execution or a new system is fielded, resources are available to perform requested software maintenance. No software changes are authorized (funds obligation or executed/initiation of an AFMC Form 206, **Temporary Work Request** or purchase order) until the user, SCCSB, and the software support organization sign the AFMC Form 230. The AFMC Form 230 will also indicate that resources are identified and available for the request. These forms are not funding documents but merely identify the SSO's capacity to perform the work.

1.4.3. Software Support Requirements Package (SSRP). The SSRP is the only required document for the UAR. Because this document is in support of individual customers, each lead command customer will receive an SSRP, with a Summary Cover Page, that covers those systems for which that customer is responsible. The SSRP consists of a yearly compilation of the AFMC Form 230s, sorted by system for a given DMAG customer/MAJCOM. The Software Support Requirements Package will be delivered to involved DMAG customers 90 days prior to the annual LSR. The ALC suppliers are responsible for developing the SSRP.

1.5. AFMC Forms Prescribed. AFMC Forms 230 and 231.

JAMES F. BAIR
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Attachment 1

GLOSSARY OF ABBREVIATIONS AND ACRONYMS

Abbreviations and Acronyms

ALC—Air Logistics Center

ATE—Automatic Test Equipment

CCB—Configuration Control Board

DMAG—Depot Maintenance Activity Group

DPEM—Depot Purchased Equipment Maintenance

FM—Financial Management

ICS—Interim Contract Support

LSR—Logistics Support Review

MAJCOM—Major Command

SCCSB—Software Configuration Control Sub-Board

SM—Single Manager

SRRP—Software Requirements Review Process

SSO—Software Support Organization

SSRP—Software Support Requirements Package

UAR—Users Annual Review

UUT—Unit Under Test

VTC—Video Teleconference